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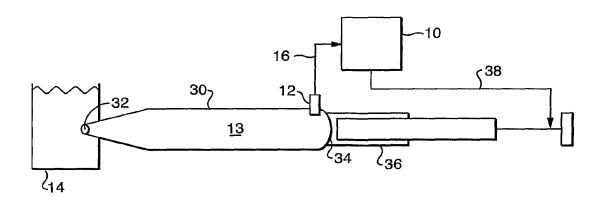
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(54) Title: HIGH PERFORMANCE LIQUID CHROMATOGRAPHY SAMPLE INTRODUCTION OPTIMIZED WITH BUBBLE DETECTION



(57) Abstract: A device (100) for detecting a condition in a fluid system (14) and initiating a response based on the condition. The device consists of a sensor (12) that responds to a first and second condition of the fluid (13) in the system and a control means (10) that receives the responses and generates command signals in based on the received response. In a liquid chromatography system, the device is used to determine the volume of components of the fluid system. In addition, the device allow leaks to be detected and permits the fluid in the system to be transported at a optimum speed. The device is well implemented utilizing to a light emitter and light receptor that are sensitive to the fluid in either a gaseous or liquid state.



